

1753 Jm

PATENT

Attorney Docket No. 0180.0031

Serial No. 10/510,661

Filed: May 26, 2005

Title: High Performance And  
Low-Cost Plastic Solar Cells

Applicant: Yang, et al.

Group Art Unit: n/a

Examiner: n/a

**CERTIFICATE OF MAILING**

I hereby certify that on **August 10, 2005**, this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service in an envelope addressed to the Commissioner for Patents, Mail Stop Amendment, P.O. Box 1450, Alexandria, VA 22313-1450.

**37 CFR 1.8(a)**  
☒ with sufficient postage as first class mail

**37 CFR 1.10**  
☐ as "Express Mail Post Office to Addressee" Mailing Label No. \_\_\_\_\_

Nina C. James  
(Type or print name of person mailing paper)

*Nina C. James*  
(Signature of person mailing paper)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

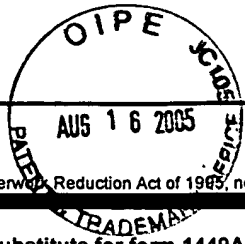
Sir:

In recognition of the continuing duty to disclose all relevant and material information of which they are aware, applicants direct the Examiner's attention to the attached PTO Form SB/08A. Copies of all non - US Patent citations are enclosed.

Dated: August 10, 2005

Respectfully submitted,

/David J. Oldenkamp/  
David J. Oldenkamp, Reg.# 29,421  
**SHAPIRO & DUPONT LLP**  
233 Wilshire Boulevard, Suite 700  
Santa Monica, California 90401  
(310) 319-5411 (Telephone)  
(310) 319-5401 (Facsimile)



AUG 16 2005

PTO/SB/08A (08-03)

Approved for use through 07/31/2006 OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
and to a collection of information unless it displays a valid OMB control number

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

| Complete if Known                    | Complete if Known                    |
|--------------------------------------|--------------------------------------|
| 1. $\frac{1}{2}$                     | 1. $\frac{1}{2}$                     |
| 2. $\frac{1}{4}$                     | 2. $\frac{1}{4}$                     |
| 3. $\frac{1}{8}$                     | 3. $\frac{1}{8}$                     |
| 4. $\frac{1}{16}$                    | 4. $\frac{1}{16}$                    |
| 5. $\frac{1}{32}$                    | 5. $\frac{1}{32}$                    |
| 6. $\frac{1}{64}$                    | 6. $\frac{1}{64}$                    |
| 7. $\frac{1}{128}$                   | 7. $\frac{1}{128}$                   |
| 8. $\frac{1}{256}$                   | 8. $\frac{1}{256}$                   |
| 9. $\frac{1}{512}$                   | 9. $\frac{1}{512}$                   |
| 10. $\frac{1}{1024}$                 | 10. $\frac{1}{1024}$                 |
| 11. $\frac{1}{2048}$                 | 11. $\frac{1}{2048}$                 |
| 12. $\frac{1}{4096}$                 | 12. $\frac{1}{4096}$                 |
| 13. $\frac{1}{8192}$                 | 13. $\frac{1}{8192}$                 |
| 14. $\frac{1}{16384}$                | 14. $\frac{1}{16384}$                |
| 15. $\frac{1}{32768}$                | 15. $\frac{1}{32768}$                |
| 16. $\frac{1}{65536}$                | 16. $\frac{1}{65536}$                |
| 17. $\frac{1}{131072}$               | 17. $\frac{1}{131072}$               |
| 18. $\frac{1}{262144}$               | 18. $\frac{1}{262144}$               |
| 19. $\frac{1}{524288}$               | 19. $\frac{1}{524288}$               |
| 20. $\frac{1}{1048576}$              | 20. $\frac{1}{1048576}$              |
| 21. $\frac{1}{2097152}$              | 21. $\frac{1}{2097152}$              |
| 22. $\frac{1}{4194304}$              | 22. $\frac{1}{4194304}$              |
| 23. $\frac{1}{8388608}$              | 23. $\frac{1}{8388608}$              |
| 24. $\frac{1}{16777216}$             | 24. $\frac{1}{16777216}$             |
| 25. $\frac{1}{33554432}$             | 25. $\frac{1}{33554432}$             |
| 26. $\frac{1}{67108864}$             | 26. $\frac{1}{67108864}$             |
| 27. $\frac{1}{134217728}$            | 27. $\frac{1}{134217728}$            |
| 28. $\frac{1}{268435456}$            | 28. $\frac{1}{268435456}$            |
| 29. $\frac{1}{536870912}$            | 29. $\frac{1}{536870912}$            |
| 30. $\frac{1}{1073741824}$           | 30. $\frac{1}{1073741824}$           |
| 31. $\frac{1}{2147483648}$           | 31. $\frac{1}{2147483648}$           |
| 32. $\frac{1}{4294967296}$           | 32. $\frac{1}{4294967296}$           |
| 33. $\frac{1}{8589934592}$           | 33. $\frac{1}{8589934592}$           |
| 34. $\frac{1}{17179869184}$          | 34. $\frac{1}{17179869184}$          |
| 35. $\frac{1}{34359738368}$          | 35. $\frac{1}{34359738368}$          |
| 36. $\frac{1}{68719476736}$          | 36. $\frac{1}{68719476736}$          |
| 37. $\frac{1}{137438953472}$         | 37. $\frac{1}{137438953472}$         |
| 38. $\frac{1}{274877906944}$         | 38. $\frac{1}{274877906944}$         |
| 39. $\frac{1}{549755813888}$         | 39. $\frac{1}{549755813888}$         |
| 40. $\frac{1}{1099511627776}$        | 40. $\frac{1}{1099511627776}$        |
| 41. $\frac{1}{2199023255552}$        | 41. $\frac{1}{2199023255552}$        |
| 42. $\frac{1}{4398046511104}$        | 42. $\frac{1}{4398046511104}$        |
| 43. $\frac{1}{8796093022208}$        | 43. $\frac{1}{8796093022208}$        |
| 44. $\frac{1}{17592186044416}$       | 44. $\frac{1}{17592186044416}$       |
| 45. $\frac{1}{35184372088832}$       | 45. $\frac{1}{35184372088832}$       |
| 46. $\frac{1}{70368744177664}$       | 46. $\frac{1}{70368744177664}$       |
| 47. $\frac{1}{140737488355328}$      | 47. $\frac{1}{140737488355328}$      |
| 48. $\frac{1}{281474976710656}$      | 48. $\frac{1}{281474976710656}$      |
| 49. $\frac{1}{562949953421312}$      | 49. $\frac{1}{562949953421312}$      |
| 50. $\frac{1}{1125899906842624}$     | 50. $\frac{1}{1125899906842624}$     |
| 51. $\frac{1}{2251799813685248}$     | 51. $\frac{1}{2251799813685248}$     |
| 52. $\frac{1}{4503599627370496}$     | 52. $\frac{1}{4503599627370496}$     |
| 53. $\frac{1}{9007199254740992}$     | 53. $\frac{1}{9007199254740992}$     |
| 54. $\frac{1}{18014398509481984}$    | 54. $\frac{1}{18014398509481984}$    |
| 55. $\frac{1}{36028797018963968}$    | 55. $\frac{1}{36028797018963968}$    |
| 56. $\frac{1}{72057594037927936}$    | 56. $\frac{1}{72057594037927936}$    |
| 57. $\frac{1}{144115188075855872}$   | 57. $\frac{1}{144115188075855872}$   |
| 58. $\frac{1}{288230376151711744}$   | 58. $\frac{1}{288230376151711744}$   |
| 59. $\frac{1}{576460752303423488}$   | 59. $\frac{1}{576460752303423488}$   |
| 60. $\frac{1}{1152921504606846976}$  | 60. $\frac{1}{1152921504606846976}$  |
| 61. $\frac{1}{2305843009213693952}$  | 61. $\frac{1}{2305843009213693952}$  |
| 62. $\frac{1}{4611686018427387904}$  | 62. $\frac{1}{4611686018427387904}$  |
| 63. $\frac{1}{9223372036854775808}$  | 63. $\frac{1}{9223372036854775808}$  |
| 64. $\frac{1}{18446744073709551616}$ | 64. $\frac{1}{18446744073709551616}$ |
|                                      |                                      |

|                               |                     |
|-------------------------------|---------------------|
| <b>Application Number</b>     | <b>10/510,661</b>   |
| <b>Filing Date</b>            | <b>May 26, 2005</b> |
| <b>First Named Inventor</b>   | <b>Yang, Yang</b>   |
| <b>Art Unit</b>               | <b>n/a</b>          |
| <b>Examiner Name</b>          | <b>n/a</b>          |
| <b>Attorney Docket Number</b> | <b>0180.0031</b>    |

|       |   |    |   |
|-------|---|----|---|
| Sheet | 1 | of | 2 |
|-------|---|----|---|

## U.S. PATENT DOCUMENTS

[illegible]

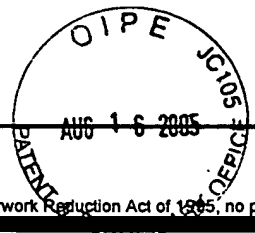
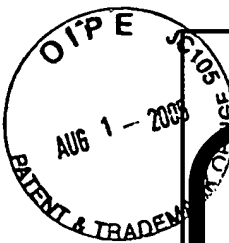
## FOREIGN PATENT DOCUMENTS

[illegible]

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08B (08-03)

Approved for use through 06/30/2006 OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

Substitute for form 1449A/PTO

Complete if Known

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(use as many sheets as necessary)

|                        |              |
|------------------------|--------------|
| Application Number     | 10/510,661   |
| Filing Date            | May 26, 2005 |
| First Named Inventor   | Yang, Yang   |
| Art Unit               | n/a          |
| Examiner Name          | n/a          |
| Attorney Docket Number | 0180.0031    |

Sheet 2 of 2

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T <sup>2</sup> |
|--------------------|-----------------------|--|----------------|
|                    | 1                     | J.J.M. Halls, C.A. Walsh, N.C. Greenham, E.A. Marseglia, R.H. Friend, S.C. Moratti, and A.B. Holmes, Nature, 376, 498 (1995)   |                |
|                    | 2                     | C.W. Tang, Appl. Phys. Lett. 48, 183 (1986)  |                |
|                    | 3                     | P. Peumans and s.R. Forrest, Appl. Phys. Lett. 79, 126 (2001)  |                |
|                    | 4                     | G. Yu, J. Gao, J.C. Hummelen, F. Wudl, and A.J. Heeger, Science, 270, 1789 (1995)  |                |
|                    | 5                     | Qibing Pei, Gang Yu, C.Z., Y. Yang and Alan J. Heeger, Science, 269, 1086 (1995)   |                |
|                    | 6                     | Y. Yang and Qibing Pei, J. Appl. Phys., 81, 3294 (1997)  |                |
|                    | 7                     | Y. Shi, J. Liu, and Y. Yang, J. Appl. Phys. 87, 4254 (2000)  |                |
|                    | 8                     | J. Liu, Y. Shi, L. Ma, and Y. Yang, J. Appl. Phys. 88, 605 (2000)  |                |
|                    | 9                     | J. Liu, T.F. Guo, and Y. Yang, J. Appl. Phys. 91, 1595 (2002)  |                |
|                    | 10                    | J. Liu, Y. Shi, and Y. Yang, Adv. Funt. Mater. 11, 420 (2001)  |                |
|                    | 11                    | T.F. Guo and Y. Yang, Appl. Phys. Lett., 80, 148 (2002)  |                |
|                    | 12                    | S.E. Shaheen, C.J. Brabee, N.S. Sariciftci, F. Padinger, T. Fromherz, J.C. Hummelen, Appl. Phys. Lett. 78, 841 (2001)  |                |

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.